

# **CITY OF CAHOKIA HEIGHTS, IL SANITARY SEWER SYSTEM SUMMARY AND STATUS REPORT – Q4 2021**

PREPARED FOR REVIEW AND APPROVAL BY:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY – REGION 5**  
ENFORCEMENT AND COMPLIANCE ASSURANCE DIVISION

AS REQUIRED UNDER:

ADMINISTRATIVE ORDER ON CONSENT

UNDER SECTION 309(a) OF THE CLEAN WATER ACT, 33 U.S.C. § 1319(a)

DATED AUGUST 16, 2021

PREPARED BY



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January 31, 2022

## **EXECUTIVE SUMMARY**

The City of Cahokia Heights, newly formed from consolidation of the former communities of Alorton, Centreville and Cahokia, plus the Commonfields of Cahokia Public Water District, is located in the southwestern portion of St. Clair County, IL, and in the region known as the American Bottoms. The Bottoms are a floodplain of the Mississippi River, between the current east riverbank and the line of limestone bluffs more or less parallel to Illinois Rt. 157, being part of the ancient riverbed, protected from surface water flooding by riverfront levees and interior levees and drainage canals, but subject to frequent groundwater flooding from seasonal precipitation and river level surcharges.

The city entered into an Administrative Order on Consent (AOC) with the USEPA on August 16, 2021 to address alleged violations of the Clean Water Act (CWA), particularly associated with certain chronic dry-weather sanitary sewer overflows (SSO's) occurring in the City's sewer system. This summary and status report is required to document actions that have been taken, and the status of conditions, in order to demonstrate progress towards achieving compliance with the CWA and the AOC.

The requirements of the AOC to date are listed below, along with a response to each requirement, stating the current status and actions that have been taken during the previous quarter to achieve compliance and complete any needed actions or milestones set forth in the AOC.

Effective Date of AOC 8/16/2021						
Order Paragraph Reference	Days from Eff. Date	Requirement	Due Date	Completed (Y/N)	Date Approved by EPA	Notes
51	10	Designate a Project Coordinator and provide EPA's Case Manager (above) with the Project Coordinator's name, address, phone number, and email address	8/26/2021	Y	NA	Proj. Coord. changed from Lynn Branson Matchingtouch to Sharlin Pfeffer
48.B.	30	Submit a "Targeted Dry-Weather SSO Investigation Plan" to identify and better understand the causes of dry-weather SSOs at the Targeted Dry-Weather SSO areas	9/15/2021	Y	12/10/21 (see notes)	Plan submitted, comments received 12/10/21, and responses to comments and plan revisions submitted 1/13/22

48.B.c.	*	Complete the Targeted Dry-Weather SSO Investigation within 90 days of EPA's approval of the Targeted Dry-Weather SSO Investigation Plan	90 days after EPA approval of 48.B. 3/10/22			
48.C.	*	Within 60 days of completion of the Targeted Dry-Weather SSO Investigation, submit a "Targeted Dry-Weather SSO Corrective Action Plan" to eliminate dry-weather SSOs at the Targeted Dry-Weather SSO areas	60 days after completion of 48.B.c. 5/9/22			
48.C.c.	*	Respondent shall implement the EPA-approved Targeted Dry-Weather SSO Corrective Action Plan alternative in accordance with the approved schedule and milestones	in accordance with the approved schedule and milestones		NA	
48.A.b.i	90	Train all City sewer staff regarding inspection of City lift stations and lift station bypass stations	11/14/2021	Y	NA	Training was completed on 11/5/21, and is being provided to all new hires
48.A.b.ii.	120	Inspect all City lift stations and temporary lift station bypass stations and submit to EPA a condition status report including date of inspection, name of inspector, operational condition of wet wells, pumps, valve vaults, and controls; and signs of damage.	12/14/2021	Y	NA	Most recent inspection reports attached
48.A.b.iii.	120	Address conditions with the potential to cause accidental injury to workers and residents at City lift stations and temporary lift station bypass stations, including unsecured or uncovered manholes and vaults, and open electrical panels	12/14/2021	Y	NA	Completed during Dec 2021, notice given to EPA on 1/3/22
48.A.b.iv.	120	Submit to EPA for review and approval a routine inspection and maintenance plan for lift station and temporary lift station bypass stations, including standard operating procedures for operation, maintenance, and inspection of the lift stations and temporary lift station bypass stations, and example(s) of the written inspection forms/checklists to be used to document each inspection	12/14/2021  Extension of deadline granted to 1/14/22	Y	pending	Inspection and maintenance plan submitted to EPA on 1/14/22
48.A.b.v.	120	Submit to EPA for review and approval an interim plan to manage and track work orders, complaints, preventative maintenance; safety incidents; and overflows and backups	12/14/2021	Y		Tracking plan attached

48.A.b.vi.	120	Complete an assessment of the appropriate number of sanitary sewer staff needed across all job categories and across all parts of the City' Sanitary Sewer System and the level of expertise and licensing required for each position	12/14/2021	In progress	NA	Staffing has been increased from 4 to 10 operations and maintenance personnel. See attached list. Assessment of the staffing levels appropriate to City of this size and system of this complexity is ongoing. Staffing will be adjusted according to these findings, as necessary, and according to the ongoing workload
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In addition to the above information regarding specific requirements under the AOC, the following is a status report and update on the three dry-weather SSO areas referenced in the AOC.

#### **N. 82<sup>nd</sup> Street**

This area consists of an 8" gravity flow sewer line in the middle of 82<sup>nd</sup> St., coupled with two lift stations, one located at the **Ex. 7f (Water Infra.)** and Bellevue Ave., and one located at on **Ex. 7f (Water Infra.)** and 81 St. A portion of the gravity line in 82<sup>nd</sup> Street – approximately **Ex. 7f (Water Infra.)** Street south, immediately adjacent and downstream of the yard cleanout cited in the consent order -- was excavated and repaired in July 2021. Work included replacement of the entire reach of sewer from manhole to manhole, CCTV of this repair, backfill, and surface restoration. This work repaired the blockage causing backups in this area, and were directly related to the SSO's coming from the broken yard cleanout. Additional SSOs have occurred subsequent to the sewer point repair and are related to bypass pump malfunctions at the two lift stations downstream of the point repair. **Plans for rehab/replacement of the two lift stations are now complete, and await IEPA permitting for construction. It is anticipated that construction on this area could begin within the next 60-90 days**

### Lift Station #5 (Pocket Road Ex. 7f (Water Infra.) )

This area consists of a shared 6" service line from two small motels – Ex. 7f (Water Infra.) feeding into the small duplex submersible pump station, and a 2 ½ inch force main running flow out to Pocket Road, and then north to a discharge into a manhole in Pocket Road near the intersection Ex. 7f (Water Infra.).

Inspection of the lift station (wet well, pumps, valve vault, site) have been conducted, with the results incorporated into preliminary engineering plans and estimates for rehabilitation of the lift station, as part of a funding request via a grant application to the St. Clair County Intergovernmental Grants Department. **The city has recently received notice that a grant for this project has been approved. Final plans and specifications can now be completed and issued for bids. It is anticipated that construction on this area could begin within the next 90-120 days.**

### Lift Station #22 (Lauralee Drive)

This area consists of two pump stations and associated gravity tributary sewers between Lauralee Drive and Renois Blvd.

Some preliminary engineering, to evaluate options and compile preliminary cost estimates, has been done. The preliminary plan is to replace the two existing pump stations on Lauralee with one new pump station in the same vicinity, and one new pump station on Renois Blvd., to remove the flow from this area currently going into Lauralee, and direct it south to an existing gravity line in Renois Blvd that runs south into the main trunkline Ex. 7f (Water Infra.) **Completion of design and subsequent construction awaits funding.**

## **FINANCING**

Repairs planned or further indicated by investigation under this plan to address past SSO's in the three target areas, or contributing conditions in tributary areas, will be financed through a combination of local funds, county intergovernmental grants, and anticipated state grant funds.

Recent developments in securing funding include ongoing discussions with the IEPA BOW regarding a \$10MM grant for sewer system rehabilitation, and the City is working cooperatively with IEPA to complete the remaining paperwork to satisfy the program diligence, and complete the grant agreement to begin the work. This grant would allow for completion of repairs and replacements in the Lauralee Drive SSO area, as well as many other sewer system point repairs,

pump and lift station rehab, and trunkline slip lining. **It is anticipated that this grant could be completed within the next 60-90 days.**

The City has recently met with the US Army Corps of Engineers, St. Louis District, regarding potential federal funding of water and sewer infrastructure construction. These discussions are still in the preliminary stages, but **indications are that there is a potential for some funding to be secured for construction sometime in early 2023.**

## **SUMMARY**

The City has expended a large amount of expense and effort to hire, staff, train, instruct personnel, and implement plans to inspect, report, repair, and maintain conditions of its sewer system in compliance with the Clean Water Act and the AOC. As can be shown by the attached reports, SSO's occurred in only two known areas during Q4 2021. The first area, N. 82<sup>nd</sup> St., is well known, and part of the SSO plan under the AOC. The area experiences periodic but infrequent SSOs from a yard cleanout on a private sewer lateral that lies upstream of the two lift stations on 82<sup>nd</sup> St. Both of these lift stations are being operated using temporary bypass pumps, until such time as construction to replace the stations with new duplex submersible pump stations can be completed. Design plans are done, and IEPA permits applied for, and the City is committed to self-funding these projects if other funds are not secured when the project is ready to go.

The other SSO occurrence, at Frontenac and Range Lane, was a sewer backup attributable to a blockage, with the SSO the result of a leaking bypass line. That area has been repaired under emergency provisions, with the excavation, point repair, cleaning, CCTV, and sliplining work having been completed during January 2022. This work eliminates the need for the bypass, and will eliminate any additional SSO risk in this area for the foreseeable future.

As mentioned above in this report, the other two known past SSO areas of concern as part of the AOC are Pocket Road and Lauralee Drive. Pocket Road has now been funded through a grant from the St Clair County Intergovernmental Grants Department and will be repaired soon. The Lauralee Drive area is considerably more complex and costly, and will require funding in the neighborhood of \$1MM dollars. In the meantime, the City's increased diligence in inspection and maintenance of lift stations, pump stations, and bypass operations has continued to mitigate SSO risks in this area, and throughout the system as a whole.

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**ATTACHMENTS**

- Interim Tracking Plan for Work Orders, Complaints, etc.
- SSO Procedures
- SSO summary
- SSO report
- Lift Station Inspections
- Personnel List